

242387

Priority Date(s):	17.4.91
Complete Specification Filing Date:	16.4.92
Class:	E04H12/22
Publication Date:	26 MAY 1994
P.O. Journal, No:	1380

Patents Form No 5

SUBSTITUTION OF APPLICANT
UNDER SECTION 24
02-Post
Pty Ltd.

THE PATENTS ACT 1953

COMPLETE SPECIFICATION

POST SUPPORT

I MERVYN JONES, an Australian/British citizen of 7 Rossmoyne Close, Elanora, Queensland 4221, Australia, hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:



THIS INVENTION relates to means for supporting vertical posts, for example, posts for supporting fencing or the like and which can also be used as means for anchoring structures, such as the bases of sheds or greenhouses, to the ground. Both such means will be hereinafter referred to as post support means, for the sake of convenience.

It has hitherto been the practice to erect and support posts by digging a hole of suitable depth and either burying one end of the post in the hole with earth or supporting the post by filling the hole around the post with concrete.

To avoid the need to dig holes, British Patent No. 1,461,802 (D. J. MILLS) and AU-B-25550/84 (570435) (METPOST LTD) disclose respective post supports where a hollow box section (or socket) to receive the post, surmounts an elongate ground engaging position (e.g. a cruciform-like spike), the latter being driven into the ground. With U.K. Patent No. 1,461,802, the posts must be dimensioned to closely fit within the socket and require holes to be drilled in the lower ends of the posts to receive bolts passing through aligned holes in the box sections to anchor the posts. In AU-B-25550/84, inwardly-directed projections in the box sections enable undersize posts to be received and rigidly located in the box sections, but no means are provided to anchor the posts therein.

It is an object of the present invention to provide a post support which can receive and support undersized posts.

It is a preferred object to provide anchoring means which lock the posts in the box sections.

It is a further preferred object to provide a fastener for wooden posts with respective tongues to engage the posts and the box sections.



Other preferred objects will become apparent from the following description.

In a broad aspect, the present invention provides a post support, preferably for wooden posts,
5 including:

an elongate ground engaging portion preferably terminating in a point at its lower end to be driven into the ground; and

a post engaging portion providing a socket
10 at the upper end of the ground engaging portion, the socket being adapted to receive one end of a post wherein:

the, or at least one, wall of the socket has a slot or hole surmounted by an outwardly-directed
15 portion, and a fastener means is driven into the gap defined by the outwardly directed portion and a post received in the socket, to restrain the post in the socket;

the, or each, slot is spaced a small
20 distance below the top of the socket and extends substantially horizontally; and

the fastener means is formed of sheet metal with a tip, or lower tooth, engageable with the post, and an upper tooth which enters the slot to engage the
25 underside of the respective outwardly directed portion of the socket.

The socket may be circular, square, rectangular, or other suitable shape in plan view.

The elongate ground engaging portion may
30 comprise a rod-like spike or a tapered, cruciform cross-section spike or spear or the like. The base of the socket may be provided with at least one drainage hole for water.

To enable the invention to be fully
35 understood, a preferred embodiment will now be



described:

FIG. 1 is a perspective view of a post support for wooden posts;

FIGS. 2a, 2b and 3 are respective front, rear and side views of the fastener; and

FIG. 4 is a sectional side view showing the post support in use.

Referring to FIGS. 1 to 4, the post support 10 for the wooden post 11 comprises a ground engaging portion 12 and a post engaging portion 13.

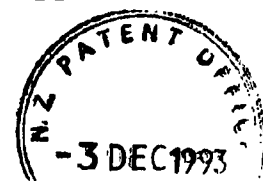
The ground engaging portion 12 has a spike 14 of cruciform cross-section which tapers to a point 15 at its lower end.

The post engaging portion 13 provides a socket 15 of square box section with side walls 16 and a base (not shown) welded to the top of the spike 14, the base having at least one water drain hole.

A horizontal slot 17 is provided in each side wall 16 and is surmounted by an outwardly-directed portion 18.

A metal fastener 19 has a body 20 which is tapered to a point or tooth 21 at its lower end. An upper tooth or tang 22 is pressed out of the body 20.

As shown in FIG. 4, the spike 14 of the post support 10 is driven into the ground and the post 11 is placed in the socket 13. The fastener 19 is driven into the gap between the post 11 and the outwardly-directed portion 18. The point or tooth 21 is driven into the side of the post 11. The upper tooth 22 is depressed as it passes the outwardly-directed portion 18, but its resilience causes it to spring outwardly into the slot 17 to underlie and engage that outwardly-directed portion 18. Any force attempting to remove or dislodge the post 11 from the socket 13 will be opposed by the engagement of the point 21 in the post 11 and the upper



tooth 22 with the outwardly-directed portion 18. The post 11 is thereby securely locked in the socket 13 by the fastener 19 (but may be selectively released by using a tool (e.g. a screwdriver) to retract the upper
5 tooth 22 into the body 20 of the fastener).

Additional security of the post 11 in the socket 13 may be effected by driving staples 23 through holes 24 in the wall 16 of the socket 13 and into the post 11.

10 It will be readily apparent to the skilled addressee that the shape of the sockets 13 will be selected to conform with the shape (e.g. circular, square, rectangular) of the posts 11.

With the fastener 19 for the wooden posts 11,
15 a lower tooth may be provided to engage in the wooden post. The upper tooth 22 may be replaced by a plurality of ratchet teeth which progressively engage the outwardly-directed portion 18 as the fastener 19 is driven into place.

20 The cruciform-type spikes 14 may be replaced by, e.g. rods terminating in points, and which may have grooves in projection along their length to provide additional keying with the ground to oppose their withdrawal.

25 Various other changes and modifications may be made to the embodiment described and illustrated without departing from the scope of the present invention defined in the appended claims.



242387



6

WHAT WE CLAIM IS:

1. A post support, for wooden posts,
including:

an elongate ground engaging portion
5 terminating in a point at its lower end to be
driven into the ground; and

a post engaging portion providing a socket
at the upper end of the ground engaging portion, the
socket being adapted to receive one end of a post
10 wherein:

the, or at least one, wall of the socket has
a slot or hole surmounted by an outwardly-directed
portion, and a fastener means can be driven into the gap
defined by the outwardly directed portion and a post
15 received in the socket, to restrain the post in the
socket;

the, or each, slot is spaced a small
distance below the top of the socket and extends
substantially horizontally; and

20 the fastener means is formed of sheet metal
with a tip, or lower tooth, engageable with the post,
and an upper tooth which enters the slot to engage the
underside of the respective outwardly directed portion
of the socket.

25 2. A post support according to Claim 1 wherein:

the socket is circular, square, rectangular
or other shape in plan view.

3. A post support according to Claim 1 or Claim 2
wherein:

30 the elongate ground engaging portion
comprises a rod-like spike, or a tapered, cruciform
cross-section spike or spear.

4. A post support substantially as hereinbefore
described with reference to FIGS. 1 to 4 of the
35 accompanying drawings.

OZ-POST PTY LTD
By Their Authorised Attorneys
JOHN A REMMINGTON & ASSOCIATES

242387

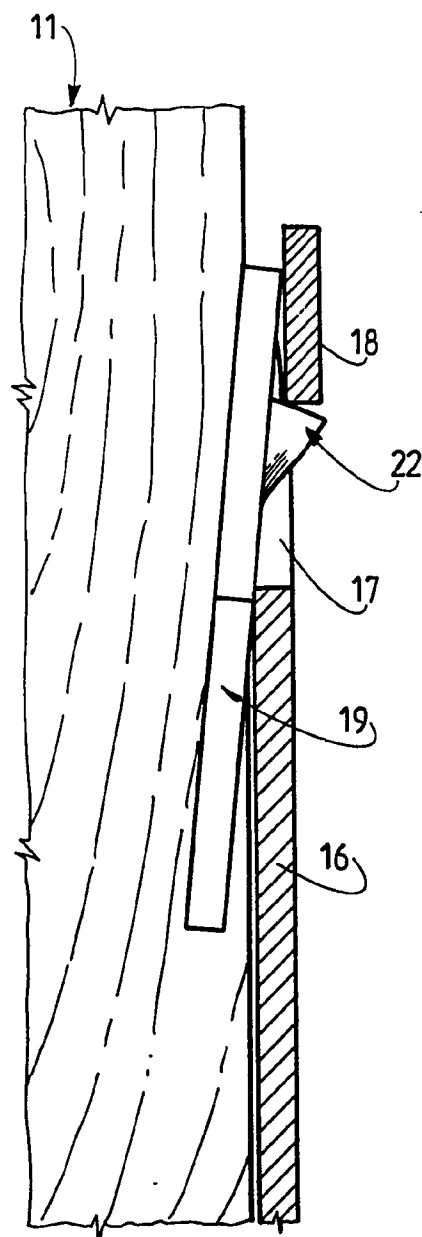
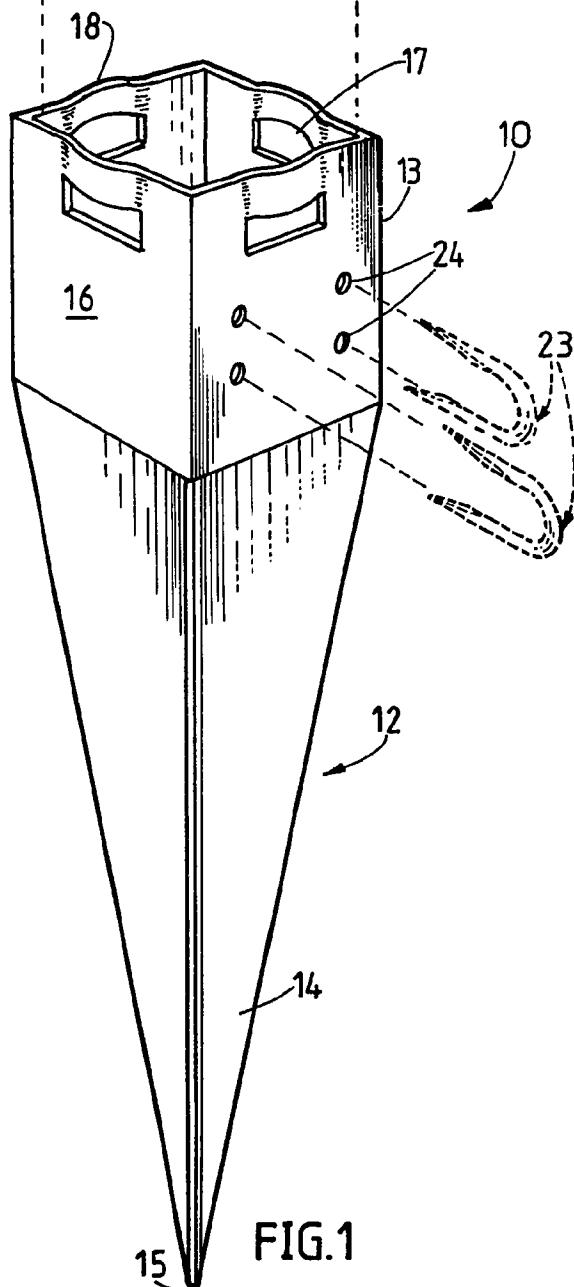
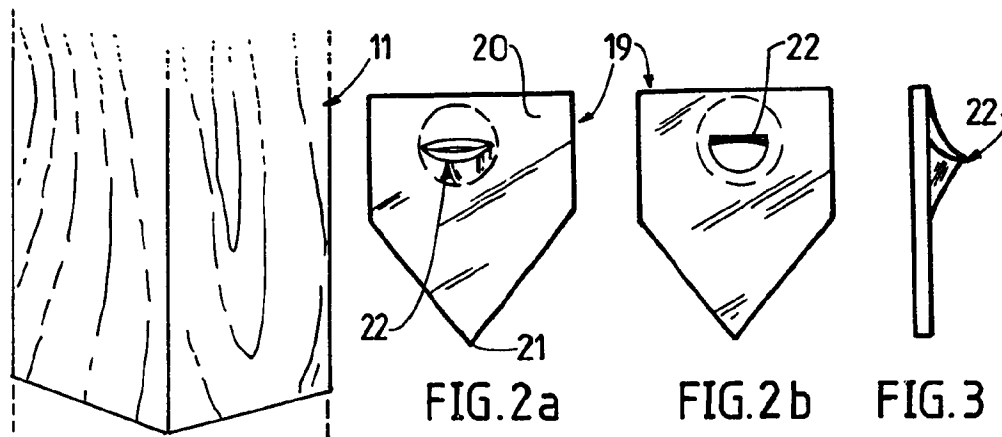


FIG. 4

MERVYN JONES
By His Authorised Attorneys
JOHN A REMMINGTON & ASSOCIATES

John A Remington

END